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| FORM PTO-1390 MODIFIED | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTORNEY'S DOCKET NUMBER 620-349 |
| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371 | | U.S. APPLICATION NO. (if known, see 37 C.F.R. 1.5) 10/516335 To Be Assigned |
| INTERNATIONAL APPLICATION NO. PCT/GB03/02314 | INTERNATIONAL FILING DATE 29 May 2003 | PRIORITY DATE CLAIMED 30 May 2002 |
| TITLE OF INVENTION PHOTONIC SWITCH WORKING IN MOMENTUM-DIVISION-MULTIPLE-ACCESS (MDMA) MODE FOR MICROWAVE AND OPTICAL WAVELENGTHS BASED UPON THE MEASUREMENT OF THE SPIN, THE ORBITAL ANGULAR MOMENTUM AND THE TOTAL ANGULAR MOMENTUM OF THE INVOLVED PHOTONS | | |
| APPLICANT(S) FOR DO/EO/US PADGETT et al | | |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: | | |
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The U.S. has been elected by the expiration of 19 months from the priority date (Article 31). 5. A copy of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is attached hereto (face pages (2 sheets), 49 pages specification, 63 claims, 9 sheets drawings). b. <input checked="" type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation <ol style="list-style-type: none"> a. <input type="checkbox"/> of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (pages specification, claims & abstract (claims), sheets drawings, page Certificate of Translation). b. <input type="checkbox"/> of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. § 371(c)(5)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <ol style="list-style-type: none"> a. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). b. <input type="checkbox"/> Declaration was submitted to the International Bureau during International Phase (see copies of Declaration (page Form PCT/RO/101 and Form PCT/IB/371 and first page of printed publication acknowledging receipt thereof attached). 10. See item 6.b. above. Items 11 To 20 below concern document(s) or information included: 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98 w/PTO-1449 Form and Intl Search Report. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. 14. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A change of power of attorney and/or address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821-1.825. 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information. Amended Claims Sheets | | |

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| U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) To Be Assigned 10/516335 | | INTERNATIONAL APPLICATION NO. PCT/GB03/02314 | | ATTORNEY'S DOCKET NUMBER 620-349 | |
| 21. <input checked="" type="checkbox"/> The following fees are submitted: | | | | CALCULATIONS PTO USE ONLY | |
| BASIC NATIONAL FEE (37 C.F.R. 1.492(a)(1)-(5): -- Neither international preliminary examination fee (37 C.F.R. 1.482) nor international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO.....\$1110.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$950.00 -- International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but international search fee (37 C.F.R. 1.445(a)(2)) paid to USPTO.....\$790.00 -- International preliminary examination fee (37 C.F.R. 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)\$750.00 -- International preliminary examination fee (37 C.F.R. 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)\$100.00 | | | | | |
| ENTER APPROPRIATE BASIC FEE AMOUNT = | | | | \$ | 950.00 |
| Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(e)). | | | | \$ | 130.00 |
| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | |
| Total Claims | 16 | minus 20 = | 0 | X \$18.00 | \$ 0.00 |
| Independent Claims | 4 | minus 3 = | 1 | X \$88.00 | 88.00 |
| MULTIPLE DEPENDENT CLAIMS(S) (if applicable) | | | \$300.00 | | \$ 0.00 |
| Petition is hereby made to extend the current due date so as to cover the filing date of this paper and attachment(s) (\$110.00/1 month; \$430.00/2 months; \$980.00/3 months) | | | | \$ | 0.00 |
| TOTAL OF ABOVE CALCULATIONS = | | | | \$ | 1168.00 |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2. | | | | | 0.00 |
| SUBTOTAL = | | | | \$ | 1168.00 |
| Processing fee of \$130.00, for furnishing the English Translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 C.F.R. 1.492(f)). | | | | + | 0.00 |
| TOTAL NATIONAL FEE = | | | | \$ | 1168.00 |
| Fee for recording the enclosed assignment (37 C.F.R. 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 C.F.R. 3.28, 3.31). \$40.00 per property | | | | + | \$ 0.00 |
| Fee for Petition to Revive Unintentionally Abandoned Application (\$1370.00 - Small Entity = \$685.00) | | | | \$ | 0.00 |
| TOTAL FEES ENCLOSED = | | | | \$ | 1168.00 |
| | | | | Amount to be: refunded | \$ |
| | | | | Charged | \$ |
| a. <input checked="" type="checkbox"/> A check in the amount of \$1168.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 14-1140 in the amount of \$_____ to cover the above fees. A duplicate copy of this form is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-1140. A duplicate copy of this form is enclosed. d. <input checked="" type="checkbox"/> CREDIT CARD PAYMENT FORM ATTACHED. e. <input checked="" type="checkbox"/> The entire content of International Application No. PCT/GB03/02314 and any U.S. and foreign application(s) corresponding thereto, and GB 0212551.6, referred to in this application is/are hereby incorporated by reference in this application. NOTE: Where an appropriate time limit under 37 C.F.R. 1.494 or 1.495 has not been met, a petition to revive (37 C.F.R. 1.137(a) or (b)) must be filed and granted to restore the application to pending status. CORRESPONDENCE ADDRESS Direct all correspondence to: <div style="display: flex; align-items: center; margin-top: 10px;"> <input checked="" type="checkbox"/> Customer Number: <div style="border: 1px solid black; padding: 5px; margin-left: 10px; flex-grow: 1;">23117</div> </div> <div style="text-align: center; margin-top: 5px; font-size: small;">Type Customer Number here</div> | | | | | |
| Telephone: (703) 816-4000 MJW:tat | | <div style="font-family: cursive; font-size: 1.2em; margin-bottom: 5px;">Mary J. Wilson</div> <div style="border-top: 1px solid black; margin-bottom: 5px;">Mary J. Wilson</div> <div style="border-top: 1px solid black; margin-bottom: 5px;">NAME</div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 32,955 November 30, 2004 </div> <div style="display: flex; justify-content: space-between;"> REGISTRATION NUMBER Date </div> | | | |